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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,806	11/26/2003	Charles L. Compton	CCCI 0114 PUS	9770
22045	7590	10/18/2005	EXAMINER	
BROOKS KUSHMAN P.C. 1000 TOWN CENTER TWENTY-SECOND FLOOR SOUTHFIELD, MI 48075			LEE, DAVID J	
			ART UNIT	PAPER NUMBER
			2633	

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

OK

Office Action Summary	Application No. 10/723,806	Applicant(s) COMPTON ET AL.	
	Examiner David Lee	Art Unit 2633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1-3, 6-10, 13, and 14 is rejected under 35 U.S.C. 102(e) as being anticipated by Phillips et al. (US Pub. No. 2003/0081619 A1).

Regarding claims 1 and 8, Phillips teaches an apparatus for use in a hybrid fiber coax (HFC) network to provide the HFC forward path spectrum (102 of fig. 1) from the head end (100 of fig. 1) to a network fiber node (111 of fig. 1), the apparatus comprising: a head end modulator (102 of fig. 1) directly receiving a switchable digital data signal and internally processing the switchable digital data signal to produce the HFC forward path spectrum (paragraph 0005) that directly drives the network fiber node (111 of fig. 1).

Regarding claims 2 and 9, Phillips teaches that the head end modulator generates an analog optical signal for the network fiber node (110 of fig. 1).

Regarding claims 3 and 10, Phillips teaches the head end modulator processes the switchable digital data signal to dynamically allocate bandwidth to different services (paragraph 0005; 104, 105, 106 of fig. 1).

Regarding claims 6 and 13, Phillips teaches that the switchable digital data signal is received as a single digital data signal input (fig. 4: ATM Mux 406 combines the data signals into a single signal).

Regarding claims 7 and 14, Phillips teaches the switchable digital data signal is received as a plurality of digital data signal inputs (Video and data signals of fig. 1).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 15, 16, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips.

Regarding claim 15, Phillips teaches a system comprising an apparatus for use in a hybrid fiber coax (HFC) network to provide the HFC forward path spectrum (102 of fig. 1) from the head end (100 of fig. 1) to a network fiber node (111 of fig. 1), the apparatus comprising: a head end modulator (102 of fig. 1) directly receiving a

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switchable digital data signal and internally processing the switchable digital data signal to produce the HFC forward path spectrum (paragraph 0005) that directly drives the network fiber node (111 of fig. 1); wherein the modulator processes its received switchable data to dynamically allocate bandwidth to different services (paragraph 0005; 104, 105, 106 of fig. 1). Phillips does not expressly disclose a plurality of apparatuses, including head end modulators and associated fiber nodes, but Official Notice is taken that it is well known in the art to have a plurality of apparatuses to receive digital data and transmit them to associated nodes. It would have been obvious to one of ordinary skill in the art at the time of invention to have a plurality of apparatuses, such as the apparatus taught by Phillips (fig. 1), in a network system in order to transmit and receive signals at multiple customer premises. Phillips does not expressly disclose that an “essentially narrow cast approach” is taken when directing information to users. However, it would have been obvious to one of ordinary skill in the art at the time of invention to “narrow cast” the information so that only the users requesting information would receive the information, thereby allowing a more bandwidth efficient system.

Regarding claim 16, Phillips teaches that the head end modulator generates an analog optical signal for the network fiber node (110 of fig. 1).

Regarding claim 19, Phillips teaches that the switchable digital data signal is received as a single digital data signal input (fig. 4: ATM Mux 406 combines the data signals into a single signal).

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5. Claims 4, 5, 11, 12, 17, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Phillips in view of Applicant's prior art.

Regarding claims 4, 5, 11, 12, 17, and 18, Phillips teaches the limitations of claims 1, 8, and 15 but does not expressly disclose that the switchable digital data signal is received in the form of a 1GigE or 10GigE signal. However, digital data at a 1GigE or 10GigE level is well known in the art, especially at the IP level. Phillips does disclose that the switching can take place on the IP level (403 of fig. 4). Also, Applicant's prior art discloses that signals at switchable forms such as 1GigE or 10GigE is well known (pg. 1, lines 24-26). It would have been obvious to one of ordinary skill in the art at the time of invention to receive signals in 1GigE or 10GigE in order to make use of its cost-effectiveness and to take advantage of the bandwidth capabilities.

Response to Arguments

6. Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Lee whose telephone number is (571) 272-2220. The examiner can normally be reached on Monday - Friday, 9:00 am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


M. R. SEDIGHIAN
PRIMARY EXAMINER

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